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| APPLICATION NO.   | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|-------------|----------------------|---------------------|------------------|
| 10/542,948  | 07/21/2005  | Emmanuel Legrand     | 047578/294904       | 9148             |
| 826 7590 12/10/2008<br>ALSTON & BIRD LLP<br>BANK OF AMERICA PLAZA<br>101 SOUTH TRYON STREET, SUITE 4000<br>CHARLOTTE, NC 28280-4000 |             |                      |                     |                  |
| EXAMINER<br>GRANT, ALVIN J  |             |                      |                     |                  |
| ART UNIT  |             | PAPER NUMBER         |                     |                  |
| 3723  |             |                      |                     |                  |
| MAIL DATE   |             | DELIVERY MODE        |                     |                  |
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/542,948

**Applicant(s)**

LEGRAND, EMMANUEL

**Examiner**

ALVIN J. GRANT

**Art Unit**

3723

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 25 August 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SF/ICE)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Claim Rejections - 35 USC § 103*

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. **Claims 1-6, 9, 10 and 13-18** are rejected under 35 U.S.C. 103(a) as being unpatentable over Jones et al. 5,048,278 in view of Moore et al. 6,401,344.  
Jones et al. discloses a cutting head comprising a passageway, a mobile string locking element, wherein the passageway is generally offset from a central axis of the head and opens at both ends at the periphery of the head, and in that the locking mobile element is a one-way locking element (**Figs. 5 and 6**); the mobile locking element (**at 66**) is located between the passageway and the periphery of the head; the locking element comprises a shoe force (**col. 4, lines 27-34**); it comprises a cavity sheltering the locking element and delimited on one side by the string passageway and on an opposite side by a surface oriented at an oblique angle relative to the direction of the string passageway, and in that the locking element comprises both a working face and a bearing face oriented at an oblique angle relative to the working face (**Figs. 5 and 6**); the working face of the locking element is oriented substantially in one plane; the locking element is acted upon by a pushing member (**66**); the locking element comprises on a working face arrangements for gripping with the string; the locking element comprises in a working face a longitudinal slot suitable for at least partially

receiving the cutting string (**Fig. 6**); and the first and second openings is an outlet from which the strand of cutting string extend, the outlet extending in a direction that is offset from the central axis of the head (**Fig. 6**). Jones et al. does not specifically disclose a rectilinear passageway. Moore discloses a cutting head having a rectilinear passageway so as to enhance the threading process of the cutting string. It would have been obvious to one having ordinary skill in the art at the time the invention was made to have made the apparatus of Jones et al. to have a rectilinear passageway as taught by Moore et al. so as to enhance the threading process of the cutting string.

3. **Claims 7, 8, 11 and 12** are rejected under 35 U.S.C. 103(a) as being unpatentable over Jones et al. in view of Moore et al. in further view of Allis 6,581,292.

4. **Referring to claims 7 and 8**, Jones et al. as modified is described above. The modified Jones et al. does not specifically disclose the locking member comprising a spring. Allis discloses a trimming head in which the locking member comprises a spring so as to apply a clamping force to the string. It would have been obvious to one having ordinary skill in the art at the time the invention was made to have made the apparatus of the of the modified Jones et al. to have a locking member comprising a spring as taught by Allis so as to apply a clamping force to the string.

5. **Referring to claims 11 and 12**, the modified Jones et al. does not specifically disclose that the gripping element comprises teeth. Allis discloses an apparatus for cutting vegetation in which the gripping element comprises teeth so as to minimize the occurrence of the string slipping. It would have been obvious to one having ordinary skill in the art at the time the invention was made to have made the cutting head of the

modified Jones et al. have teeth on the gripping element as taught by Allis so as to minimize the occurrence of the string slipping.

***Response to Arguments***

6. Applicant's arguments filed 8/25/08 have been fully considered but they are not persuasive.
7. In response to applicant's arguments that neither US Patent 5,048,278 (to Jones et al.) nor US Patent 6,401,344 (to Moore) teach or suggest a passageway that is resilient and offset from a central axis of the head, Jones in Fig. 6 shows a resilient passageway the is offset from a central axis; and Moore teaches that the axis may be rectilinear.
8. In response to applicant's arguments that neither Jones nor Moore teach or suggest a movable locking element that is a one way locking element, Jones discloses a locking structure (col. 4, lines 22-39) which keeps the filament from being moved in the reverse direction, and the cutting filaments are removably secured to the cutting blade.

***Conclusion***

9. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not

mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ALVIN J. GRANT whose telephone number is (571)272-4484. The examiner can normally be reached on Mon-Fri 8:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph J. Hail can be reached on (571) 272-4485. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/A. J. G./  
Examiner, Art Unit 3723

Application/Control Number: 10/542,948

Page 6

Art Unit: 3723

/Joseph J. Hail, III/

Supervisory Patent Examiner, Art Unit 3723